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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,851	03/18/2004	Shinsuke Toyomasu	250560US0	5866

22850 7590 07/24/2006

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EXAMINER

MESH, GENNADIY

ART UNIT PAPER NUMBER

1711

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/802,851

**Applicant(s)**

TOYOMASU ET AL.

**Examiner**

Gennadiy Mesh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-6 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-10 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group II, Claims 3-6 and 10 in the reply filed on 05/24/06 is acknowledged. The traversal is on the ground(s) that office has not shown an undue burden in searching of all claims and that process of Group III can be used for make other and materially different film structures than product of Group II .

This is not found persuasive because: as evidence by the differences in classifications, a search of all claims would impose additional serious burden on the office; and the process of Group III can be used for make other and materially different film structures than product of Group II as , for example, packaging oriented films.

2. The requirement is still deemed proper and is therefore made FINAL. Claims 1,2 and 7-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 05/24/06.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 3-6 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 7,001,967 in view of information admitted by Applicant( see paragraph [ 0004] and [0005],page 1) and in further view of Arakawa et al.( US 5,213,852). Optical film, exhibiting negative birefringence claimed by Applicant in Claims 3-6 and 10 comprises two components: first – copolymer of specific olefin and N-phenyl-substituted maleimide, exhibiting Tg about 200<sup>0</sup>C and negative birefringence, claimed in U.S. Patent No. 7,001,967 and second component – acrylonitrile-styrene based copolymer, exhibiting Tg about 100<sup>0</sup>C and negative birefringence disclosed in U.S. Patent 5,213,852.

U.S. Patent No. 7,001,967 does not teach use of second component in composition claimed by applicant. However, Applicant admits, that prior art teach that both components are fully miscible and formed thermodynamically stable blend ( see paragraph [0005],page 1). Applicant also admits that prior art teach ( see paragraph [0004],page 1) that Tg about 140<sup>0</sup>C is preferable for this type of optical films. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention use combination of two components, exhibiting same intrinsic negative birefringence properties, in order to obtain composition for optical film with resulting Tg about 140 <sup>0</sup>C.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Le-Khac ( US 4,605,700). Le-Khac discloses ( see claims) a molded polymer composition comprising component A and B in the ratio from about 99:1 to about 1:99, wherein :

Component A: N-aryl substituted maleimide/C<sub>2</sub> – C<sub>4</sub> alpha-olefin copolymer, having average molecular weight from about  $5 \times 10^4$  to about  $5 \times 10^5$  and

Component B: acrylonitrile-styrene copolymer or acrylonitrile- -butadiene- styrene terpolymer, wherein acrylonitrile presented in a range from 15% to about 35% by weight, having average molecular weight from about  $7 \times 10^4$  to about  $1.5 \times 10^4$ .

Le-Khac silent regarding negative birefringence of this molded composition. However, because intrinsic negative birefringence is inherent property of the material, than composition will exhibit same negative birefringence property.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi et al.( JP 05-117334) and in view of Arakawa et al.( US 5,213,852).
9. Satoshi discloses identical basic copolymer as Component A claimed by Applicant and teaches that this copolymer can exhibit low positive intrinsic birefringence or negative apparent (at stressed state) birefringence, which was expected by theoretical calculation( see paragraph [0026],page 3 and Example 2). Same art also teaches that blend of two different polymers ( see paragraph [0022],page3) will exhibit intermediate resultant birefringence. Satoshi point out that styrene contain polymers will have negative birefringence , but silent about use of acrylonitrile-styrene copolymers for this purpose. However, Arakawa discloses (abstract, lines 20-40,column 3) acrylonitrile-styrene basic copolymer, identical to Applicant's component B and teaches that this copolymer can be blend ( see line 5-20,column 9) with other polymers in order to obtain oriented optical film exhibiting negative birefringence, retardation and specific relation between refractive indexes.( see abstract, line 45 –60,column 5).

It is clear that film of same composition and thickness will be capable have same Retardation properties, as claimed in Claim 10 and will be capable undergo orientation in order to meet specific relation between refractive indexes as claimed in Claims 5 and 6.

Therefore , it would have been obvious to one of ordinary skill in the art at the time of the invention blend component A per teaching of Satoshi and component B per teaching of Arakawa, in order to obtain optical film exhibiting negative birefringence,

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specific relation between refractive indexes and retardation properties, and with wide processing window and comparatively high heat resistant.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901. The examiner can normally be reached on 8a.m - 4 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gennadiy Mesh  
Examiner  
Art Unit 1711

GM 07/11/06

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James J. Seidleck  
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